

State of California
California Energy Commission
Minutes of the May 10, 2017, Energy Commission Business Meeting

The meeting was called to order by Chair Weisenmiller. The Pledge of Allegiance was led by Chair Weisenmiller.

Present:

Robert B. Weisenmiller, Chair
Karen Douglas, Commissioner
J. Andrew McAllister, Commissioner

David Hochschild, Commissioner
Janea A. Scott, Commissioner

The Chair announced that Item 2 will be held. Commissioner McAllister disclosed that his wife is a professor at UC Davis King Hall and that UC Davis is involved in Items 1e and 16b. Commissioner Douglas disclosed that she is a professor at UC Davis King Hall and that UC Davis is involved in Items 1e and 16b.

THE COMMISSION WILL CONSIDER AND MAY TAKE ACTION ON THE FOLLOWING ITEMS:

1. CONSENT CALENDAR. (Items on the Consent Calendar will be taken up and voted on as a group. A commissioner may request that an item be moved and discussed later in the meeting.)
 - a. PROPOSED REVISIONS TO THE NEW SOLAR HOMES PARTNERSHIP GUIDEBOOK, TENTH EDITION (NSHP GUIDEBOOK, TENTH EDITION). Proposed resolution approving modifications to the New Solar Homes Partnership (NSHP) Guidebook, Tenth Edition. The NSHP Guidebook describes the requirements for participating in the NSHP program and receiving incentives for installing eligible solar energy systems on new residential construction located in specified investor-owned utility territories. Proposed changes to the NSHP Guidebook will update the reservation application and payment claim processes to reflect changes required by the statewide transition to the Financial Information System for California (Fi\$Cal) on July 1, 2017. In addition, staff proposes minor changes to the Established Installer Reservation Form and the Incentive Disclosure Affidavit that will satisfy requirements listed in the NSHP Guidebook. Contact: Geoffrey Dodson.
 - b. CALSTART, INC. Proposed resolution approving Agreement 600-16-007 with CALSTART, Inc. for a contract up to \$100,000 to provide the Energy Commission membership for one-year in Veloz. Membership allows for Energy Commission participation in member meetings, working groups, workshops, and other events; participation in briefings and providing input on electric vehicle awareness campaign including the prominent display of the Energy Commission logo on public facing electric vehicle awareness campaign literature and displays; and provides a forum to collaborate with stakeholders in the electric vehicle community. (ARFVTP funding) Contact: Jennifer Masterson.
 - c. SUN SIERRA SOFTWARE, INC. Proposed resolution approving Purchase Order #16-409-00-008 for \$75,000 with Sun Sierra Software, Inc. for ongoing support and maintenance for the Energy Consumption Data Management System. The

software system serves a critical business need and collects, manages, and publishes energy consumption data into usable formats for Energy Commission forecasters, stakeholders, and the public. (ERPA funding) Contact: Linda Schrupp.

- d. INNOSEPPRA, LLC. Proposed resolution approving Amendment 1 to Grant Agreement EPC-14-028 with InnoSeptra, LLC to reallocate the budget by increasing the amount budgeted for equipment and materials by \$432,858 and reducing by the same amount funds currently allocated to labor and overhead, and by eliminating a minor subcontractor. There will be no net change in the total amount originally awarded to the project. Additionally, InnoSeptra, LLC will increase its match budget by \$230,000, bringing the total match funding to \$959,150. (EPIC funding) Contact: Mike Kane.
- e. ELECTRIC POWER RESEARCH INSTITUTE, INC. Proposed resolution approving Amendment 1 to Grant Agreement EPC-15-020 with Electric Power Research Institute, Inc. to reallocate \$310,560. This reallocation is needed to update project budget categories to reflect a shift in task responsibilities between Recipient and Subcontractors. There will be no net change to the original grant amount. (EPIC funding) Contact: Brad Williams.

Commissioner Scott announced she serves as the Chair of the Plug-in Electric Vehicle Collaborative, which will be superseded by Veloz and due to her role in PEVC and her participation in establishing Veloz, she recused herself from the consideration of Item 1b. Commissioner Hochschild announced he will be joining the board of Veloz and recused himself consideration of Item 1b. Commissioner Scott and Commissioner Hochschild left the room. Commissioner Douglas moved and Commissioner McAllister seconded approval of Item 1b. The vote was 3-0. After both Commissioners Scott and Hochschild returned, Commissioner McAllister moved and Commissioner Douglas seconded approval of all items, except Item 1b. The vote was unanimous (5-0).

- 2. ENERGY COMMISSION COMMITTEE APPOINTMENTS. Possible approval of appointments to the Energy Commission's Standing Committees and Siting Case Committees. Contact: Kevin Barker. (Staff presentation: 5 minutes)

Item 2 was held. No action taken.

- 3. PALMDALE ENERGY PROJECT (LICENSED AS PALMDALE HYBRID POWER PROJECT) (08-AFC-09C). Possible approval of an order granting the petition to extend the start of construction deadline. Contact: Eric Veerkamp. (Staff Presentation: 5 minutes)

Commissioner Douglas moved and Commissioner Scott seconded approval of Item 3. The vote was unanimous (5-0).

- 4. ENERGY EFFICIENCY REGULATIONS FOR COMPUTERS, COMPUTER MONITORS, SIGNAGE DISPLAYS, AND BATTERY CHARGERS. Proposed resolution approving minor modifications to, and re-adopting, the Appliance Efficiency Regulations in Title 20 of the California Code of Regulations relating to energy efficiency standards for computers, computer monitors, signage displays, and battery chargers. The changes respond to comments made regarding the Automatic Brightness Control (ABC) test procedure for computers with an integrated display at the December 14, 2016 adoption hearing and provide additional clarity to other provisions of the regulations. This adoption hearing follows a 15-day public comment period. Contact: Soheila Pasha. (Staff presentation: 5 minutes)

Commissioner McAllister moved and Commissioner Douglas seconded approval of Item 4. The vote was unanimous (5-0).

5. ~~MECHANICAL ACCEPTANCE TEST TECHNICIAN CERTIFICATION PROVIDER APPLICATION FROM THE REFRIGERATION SERVICE ENGINEERS SOCIETY. Proposed resolution approving the Refrigeration Service Engineers Society application to become a Mechanical Acceptance Test Technician Certification Provider pursuant to Section 10-103.2(e) of the 2016 Building Energy Efficiency Standards, codified in the California Code of Regulations, Title 24, Part 1, Chapter 10. Contact: Joe Loyer. (Staff presentation: 5 minutes)~~

No discussion of or action taken on Item 5.

6. GEOTHERMAL GRANT AND LOAN PROGRAM, GFO-16-505. This solicitation sought proposals to fund eligible local jurisdictions and eligible private entities for geothermal energy-related projects in California. (GRDA funding) Contact: Elisabeth de Jong. (Staff presentation: 5 minutes)
- a. ~~MODOC JOINT UNIFIED SCHOOL DISTRICT. Proposed resolution approving Agreement GEO-16-001 with the Modoc Joint Unified School District for an \$880,000 grant to expand the existing geothermal heating system by constructing additional retrofits and heating system upgrades at Modoc High School, Modoc Middle School, and Alturas Elementary School; and extending the geothermal piping to the planned Modoc Medical Center site.~~
- b. GOLDEN HAVEN HOT SPRINGS SPA AND RESORT. Proposed resolution approving Agreement GEO-16-002 with Golden Haven Hot Springs Spa and Resort for a \$134,642 grant to drill and test an injection well for geothermal fluids used at the resort that are currently discharged to the City of Calistoga's sanitary sewer. Once completed, the injection well will be connected to an existing geothermal heat exchange system and the system will be tested. The injection well will allow non-contact geothermal fluids to be injected back into the geothermal reservoir to maintain reservoir pressure.

No discussion of or action taken on Item 6a. Commissioner Hochschild moved and Commissioner Scott seconded approval of Item 6b. The vote was unanimous (5-0).

7. MONTEREY PENINSULA AIRPORT DISTRICT. Proposed resolution adopting California Environmental Quality Act Findings for Monterey Peninsula Airport District's Monterey Regional Airport Photovoltaic Project, and approving Agreement 001-16-ECA with Monterey Peninsula Airport District. (ECAA funding) Contact: Balraj S. Sandhu. (Staff presentation: 5 minutes)
- a. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Findings that, in addition to the lead agency Monterey Peninsula Airport District's Initial Study and Mitigated Negative Declaration, the work under the proposed project presents potentially significant environmental impacts to cultural resources and that mitigation measures different from those analyzed in the Initial Study and Mitigated Negative Declaration are required to reduce environmental impacts to a less than significant level. These additional mitigation measures will be implemented by Monterey Peninsula Airport District, and are included as conditions in proposed Agreement 001-16-ECA.
- b. MONTEREY PENINSULA AIRPORT DISTRICT'S MONTEREY REGIONAL AIRPORT PHOTOVOLTAIC PROJECT. Proposed resolution approving Agreement 001-16-ECA with Monterey Peninsula Airport District for a \$3,000,000 loan at one percent interest to install an 864 kWdc ground mounted multiple-axis photovoltaic system at the Monterey Regional Airport. The project is estimated to generate 1,450,000 kWh of electricity annually and reduce the Airport's yearly utility expense by \$183,643. In addition, this project will reduce

greenhouse gas emissions by 500 tons annually. The project will be fully funded by the Energy Commission loan. The simple payback on the loan amount is 16.3 years.

Commissioner McAllister moved and Commissioner Douglas seconded approval of Item 7. The vote was unanimous (5-0).

8. LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT. Proposed resolution adopting California Environmental Quality Act Findings for Lake Arrowhead Community Services District's Hesperia Farms Site Solar Facility Project, and approving Agreement 003-16-ECD with Lake Arrowhead Community Services District. (ECAA funding) Contact: Nelson Pena. (Staff presentation: 5 minutes)
 - a. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Findings that, based on the lead agency Lake Arrowhead Community Services District's Initial Study and Mitigated Negative Declaration, the work under the proposed project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated.
 - b. LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT'S HESPERIA FARMS SITE SOLAR FACILITY PROJECT. Agreement 003-16-ECD with Lake Arrowhead Community Services District for a \$3,000,000 loan at one percent interest for a 939.6 kWdc ground mounted single axis solar photovoltaic electric generation system at the Hesperia Farms Site Solar Facility. Based on the loan amount, the simple payback is 12.4 years. The project will save approximately 2,200,000 kWh and \$242,000 annually. In addition, this project will reduce greenhouse gas emissions by 759 tons annually.

Commissioner McAllister moved and Commissioner Douglas seconded approval of Item 8. The vote was unanimous (5-0).

9. AMADOR WATER AGENCY. Proposed resolution adopting California Environmental Quality Act Findings for Amador Water Agency's installation of 440 kW In-Conduit Hydroelectric Project, and approving Agreement 004-16-ECD with Amador Water Agency. (ECAA funding) Contact: Shahid Chaudhry. (Staff presentation: 5 minutes)
 - a. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Findings that, based on the lead agency Amador Water Agency's Initial Study and Mitigated Negative Declaration, the work under the proposed project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated.
 - b. AMADOR WATER AGENCY'S INSTALLATION OF 440 kW IN-CONDUIT HYDROELECTRIC PROJECT. Agreement 004-16-ECD with Amador Water Agency (Agency) for a \$1,472,000 loan at one percent interest to the Agency for installing a 440 kW pelton turbine at a water transfer pipeline between two reservoirs. On completion, the project will reduce about 1,351,000 kWh of grid electricity consumption annually saving the Agency about \$129,000 in utility costs. In addition, the project will reduce about 466 tons of carbon dioxide equivalent (CO₂e) GHG emission every year. Based on the loan amount, the simple payback is 11.4 years.

Commissioner McAllister moved and Commissioner Scott seconded approval of Item 9. The vote was unanimous (5-0).

10. SUSTAINABLE FREIGHT TRANSPORTATION PROJECTS, GFO-16-604. This solicitation sought proposals to fund projects that demonstrate medium or heavy-duty advanced vehicle technologies at California's major seaports. (ARFVTP funding) Contact: Larry Rillera. (Staff presentation: 5 minutes)
- a. CITY OF LONG BEACH HARBOR DEPARTMENT. Proposed resolution approving Agreement ARV-16-024 with the City of Long Beach Harbor Department for a \$9,755,000 grant to conduct a field demonstration of zero- and near-zero emissions advanced technology vehicles. The demonstration will occur at the Port of Long Beach and will benefit disadvantaged communities.
 - b. SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. Proposed resolution approving Agreement ARV-16-025 with the South Coast Air Quality Management District for a \$10,000,000 grant to conduct a field demonstration of zero- and near-zero emissions advanced technology vehicles. The demonstration will occur at the Port of Los Angeles and will benefit disadvantaged communities.
 - c. CITY OF LOS ANGELES HARBOR DEPARTMENT. Proposed resolution approving Agreement ARV-16-026 with the City of Los Angeles Harbor Department for a \$4,524,000 grant to conduct a field demonstration of zero-emission vehicles, freight handling equipment and related charging infrastructure. The demonstration will occur at the Port of Los Angeles and will benefit disadvantaged communities.

Commissioner Scott moved and Commissioner Hochschild seconded approval of Item 10. The vote was unanimous (5-0).

11. CERRITOS COMMUNITY COLLEGE DISTRICT. Proposed resolution approving Agreement 600-16-005 for a \$1,000,000 contract with Cerritos Community College District, host for the Advanced Transportation Technology and Energy (ATTE) Center, an initiative of the California Community Colleges Chancellor's Office. Under this contract, ATTE will develop and implement workforce development clean fuel career pilot programs for high schools, focusing on underserved communities, minority groups, and regions impacted by poor air quality. (ARFVTP funding) Contact: David Nichols. (Staff presentation: 5 minutes)

Commissioner Scott moved and Commissioner McAllister seconded approval of Item 11. The vote was unanimous (5-0).

12. COMMUNITY-SCALE AND COMMERCIAL-SCALE ADVANCED BIOFUELS PRODUCTION FACILITIES, GFO-15-606. This solicitation sought proposals to fund low carbon biofuel production projects at new and existing biofuel production facilities; existing biofuel production facilities must expand or modify facilities to increase production capacity. Eligible biofuels are diesel substitutes, gasoline substitutes, and biomethane, as defined in the solicitation. (ARFVTP funding) Contact: Andrew Hom. (Staff presentation: 5 minutes)
- a. TRACY RENEWABLE ENERGY. Proposed resolution adopting California Environmental Quality Act Findings for Tracy Renewable Energy's Tracy Integrated Campus: Renewable Ethanol from Sugar Beets Project, and approving Agreement ARV-16-022 with Tracy Renewable Energy.

- i. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Findings that, based on the lead agency City of Tracy's December 2011 Initial Study and Mitigated Negative Declaration, and September 2012 Addendum to the Initial Study and Mitigated Negative Declaration for the Tracy Desalination and Green Energy Project, the work under the proposed project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated.
- ii. Agreement ARV-16-022 with Tracy Renewable Energy for a \$5,179,885 grant to design, build, and operate an over 15 million diesel gallon equivalent (DGE) per year ethanol facility, located at a developing integrated renewable energy and water management campus in Tracy, California. The proposed ethanol facility will utilize locally grown sugar beets as a feedstock and will produce an ultra-low carbon fuel with a carbon intensity value of at least 37.73 gCO₂eg/MJ and reduce greenhouse gas emissions by 129,919 MT CO₂e per year.
- b. CITY OF MANTECA. Proposed resolution adopting California Environmental Quality Act Findings for the City of Manteca Waste to Fuel program and approving Agreement ARV-16-027 with the City of Manteca.
 - i. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Findings that, based on the lead agency City of Manteca's Notice of Exemption of Lovelace Transfer Station Food Processing Project, Final Environmental Impact Report and Mitigation Monitoring and Reporting Program for City of Manteca Wastewater Quality Control Facility (WQCF) and Collection System Master Plans Update Project, and Initial Study and Mitigated Negative Declaration for Manteca WQCF Alternative Energy Program Project, the work under the proposed project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated to a less-than-significant level.
 - ii. Agreement ARV-16-027 with the City of Manteca for a \$3,004,000 grant to design, construct, and operate a biomethane facility to produce 140,000 diesel gallon equivalents of low carbon renewable natural gas (RNG) per year from co-digested food waste, fats, oils, and grease (FOG), and sewage sludge. The biomethane facility will be integrated with the City's food waste recovery and receiving facilities and a CNG vehicle fueling station. The project is being designed with a consideration for future capacity expansion, potentially doubling in the near future. Produced RNG will displace current use of diesel and gasoline in the City-owned fleet. The City has already begun purchasing new CNG vehicles for the waste hauling fleet as part of the program.
- c. CR&R INCORPORATED. Proposed resolution adopting California Environmental Quality Act Findings for the CR&R Biomethane Facility Phase 3 Project and approving Agreement ARV-16-028 with CR&R Incorporated.
 - i. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Based on the lead agency City of Perris's Minor Modification to Conditional Use Permit 91-27 and existing Mitigated Negative Declaration and Major Modification (11-04-0001), the work under the proposed project is expected to not have new significant or substantially more severe environmental impacts beyond those already considered and will have impacts mitigated to a less-than-significant level.

- ii. Agreement ARV-16-028 with CR&R Incorporated for a \$3,096,649 grant to build a third anaerobic digester and biogas cleanup system at CR&R's material recovery facility in Perris, CA to expand its production of biomethane from municipal organic waste. The upgrades will allow CR&R to accept and utilize an additional 229 tons of waste per day to make 966,482 diesel gallons equivalents of additional biomethane per year, enough to transition the rest of CR&R's CNG fleet to run on biomethane and to provide excess biomethane directly into a natural gas pipeline for other transportation users.

Commissioner Scott moved and Commissioner Douglas seconded approval of Item 12. The vote was unanimous (5-0).

13. ZERO-EMISSION VEHICLE REGIONAL READINESS AND PLANNING, GFO-16-601. This solicitation sought proposals to fund projects that will support new and existing planning efforts for zero-emission vehicles (battery-electric vehicles (including plug-in hybrid electric vehicles) and hydrogen fuel cell electric vehicles). (ARFVTP funding) Contact: Sharon Purewal. (Staff presentation: 5 minutes)
 - a. TUOLUMNE COUNTY TRANSPORTATION COUNCIL. Proposed resolution approving Agreement ARV-16-019 with Tuolumne County Transportation Council for a \$200,000 grant to develop a Zero-Emission Vehicle (ZEV) Readiness Plan for the Central Sierra Region which includes Alpine, Amador, Calaveras, and Tuolumne Counties. The Central Sierra Nevada ZEV Readiness Plan will identify, reduce, and resolve barriers to the widespread deployment of private and public ZEV infrastructure.
 - b. SAN BERNARDINO COUNCIL OF GOVERNMENTS. Proposed resolution approving Agreement ARV-16-021 with San Bernardino Council of Governments for a \$181,000 grant to develop a San Bernardino Countywide Zero-Emission Vehicle (ZEV) Readiness and Implementation Plan in preparation of implementing future ZEV infrastructure in the region as funding sources become available.
 - c. SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT. Proposed resolution approving Agreement ARV-16-023 with Sacramento Metropolitan Air Quality Management District for a \$292,962 grant for zero-emission vehicle (ZEV) deployment planning efforts that will include fuel cell electric vehicles, hydrogen refueling stations, plug-in electric vehicles, and direct current fast charging. The project will identify infrastructure, policies, incentives, and processes that will encourage high-mileage drivers including super-commuters, transportation network company drivers, fleet operators, and transit companies to replace conventional vehicles with ZEVs.

Commissioner Scott moved and Commissioner McAllister seconded approval of Item 13. The vote was unanimous (5-0).

14. DOE-LAWRENCE BERKELEY NATIONAL LABORATORY. Proposed resolution approving Agreement EPC-16-056 with the Department of Energy's Lawrence Berkeley National Laboratory for a \$1,000,000 grant to develop building control software tools that will enable building designers to compare performance implications of different control strategies based on building requirements. Adoption of the tool will improve design and implementation of building controls with a potential to reduce energy use by 12 percent. This project is a cost share grant to the U.S. DOE's \$2,000,000 in funding. (EPIC funding) Contact: Karen Perrin. (Staff presentation: 5 minutes)

Commissioner McAllister moved and Commissioner Douglas seconded approval of Item 14. The vote was unanimous (5-0).

15. ADVANCED VEHICLE-GRID INTEGRATION RESEARCH AND DEMONSTRATION, GFO-16-303. This solicitation sought proposals to fund AR&D projects that effectively integrate plug-in electric vehicles (PEVs) into the electricity grid by enabling a higher mix of renewable resources, advancing the capabilities of PEVs, and improving the commercial viability of PEVs; and to fund TD&D projects that provide and quantify multiple real-world benefits of advanced vehicle-grid integration applications for PEV fleets. (EPIC funding) Contact: Kiel Pratt. (Staff presentation: 5 minutes)
- a. BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY (SLAC NATIONAL ACCELERATOR LABORATORY). Proposed resolution approving Agreement EPC-16-057 with the Board of Trustees of the Leland Stanford Junior University for a \$1,500,000 grant to develop an electric vehicle charging infrastructure forecasting and mapping tool that implements smart charging strategies based on predicted electric vehicle mobility needs, power grid conditions, and renewable energy generation.
 - b. PROSPECT SILICON VALLEY. Proposed resolution approving Agreement EPC-16-058 with Prospect Silicon Valley for a \$1,899,199 grant to develop advanced energy management and grid service capabilities for electric buses with a major transit agency, to integrate the capabilities into fleet operations, and to demonstrate these capabilities and the resulting improvement in the business case for electric buses.
 - c. DOE-LAWRENCE BERKELEY NATIONAL LABORATORY. Proposed resolution approving Agreement EPC-16-059 with the Department of Energy's Lawrence Berkeley National Laboratory for a \$1,500,000 grant to demonstrate an automated control system for a fleet of plug-in electric vehicles and repurposed second-life batteries that reduces the overall cost of plug-in electric vehicle ownership by maximizing battery lifetime, shifting load to reduce electricity and demand charges, and providing vehicle-to-grid and vehicle-to-building services including those supporting utilization of on-site solar generation.
 - d. MOTIV POWER SYSTEMS, INC. Proposed resolution approving Agreement EPC-16-060 with Motiv Power Systems, Inc. for a \$4,529,956 grant to develop an onboard smart charger solution and an onboard bi-directional charger solution to enable vehicle grid integration options for medium- and heavy-duty fleet vehicles. The technology will be demonstrated using existing zero emissions delivery trucks at four AmeriPride Services locations within disadvantaged communities in Fresno, Bakersfield, Merced, and Stockton. The benefits of the onboard charger solutions include reducing the need for external charge station upgrades, demand charge mitigation, and consideration of electrical grid integration activities.
 - e. ZERO NET ENERGY ALLIANCE. Proposed resolution approving Agreement EPC-16-065 with Zero Net Energy Alliance for a \$3,327,953 grant to demonstrate E-bus-to-grid, quantify the costs and benefits, develop use cases, and document best practices for an E-bus fleet.

Commissioner McAllister moved and Commissioner Scott seconded approval of Item 15. The vote was unanimous (5-0).

16. ADVANCING CUTTING-EDGE TECHNOLOGIES AND STRATEGIES TO REDUCE ENERGY USE AND COSTS IN THE INDUSTRIAL, AGRICULTURAL AND WATER SECTORS, GFO-16-305. This solicitation sought proposals to fund applied research and development projects that will advance and test pre-commercial energy efficiency and demand response technologies and strategies for the industrial, agricultural and water sectors. (EPIC funding) Contact: Cyrus Ghandi. (Staff presentation: 5 minutes)
- a. ELECTRIC POWER RESEARCH INSTITUTE, INC. Proposed resolution approving Agreement EPC-16-026 with Electric Power Research Institute, Inc. for a \$3,000,000 grant to develop and pilot test integrated control strategies for demand response for a municipal water pumping plant and an industrial refrigerated warehouse. The testing will occur in facilities located in Southern California.
 - b. UNIVERSITY OF CALIFORNIA, DAVIS. Proposed resolution approving Agreement EPC-16-062 with the Regents of the University of California, on behalf of the Davis campus, for a \$2,984,983 grant to develop a demand management system technology and strategy to enable a water utility to reduce or shift energy loads based on different utility tariff structures. This will allow the water utility to participate in demand response and load shifting programs and reduce energy costs. The technology will be tested at the Moulton Niguel Water District in Orange County.

Commissioner McAllister moved and Commissioner Hochschild seconded approval of Item 16. The vote was unanimous (5-0).

17. U.S. GEOLOGICAL SURVEY. Proposed resolution approving Agreement EPC-16-064 with U.S. Geological Survey for a \$499,785 grant to investigate the mechanisms by which birds are attracted to utility-scale solar energy facilities (i.e., "lake effect hypothesis") and thereby identify potential deterrent or mitigation strategies. (EPIC) Contact: David Stoms. (Staff presentation: 5 minutes)

Commissioner Douglas moved and Commissioner Scott seconded approval of Item 17. The vote was unanimous (5-0).

18. DISCUSSION OF ENERGY COMMISSION PROGRESS RE IMPLEMENTATION OF THE CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350). Staff presentation regarding progress on implementation of SB 350 requirements, including administration of the California Renewables Portfolio Standard program, review of local publicly owned electric utility integrated resource plans, revision of Commission data collection regulations to improve demand forecasting, identification of progress in meeting the bill's goals of 50% renewables procurement and doubling of energy efficiency, implementation of widespread transportation electrification, and preparation and publication of the study required by Public Resources Code section 25327 regarding barriers for low-income customers to energy efficiency, weatherization, and renewable energy investments. Contact: Michael Sokol. (Staff presentation: 5 minutes)

Staff presented Information Item 18.

19. **Minutes:** Possible approval of the April 27, 2017 Business Meeting minutes.

Commissioner Scott moved and Commissioner McAllister seconded approval of Item 19. The vote was unanimous (5-0).

20. **Lead Commissioner or Presiding Member Reports.** The Commissioners reported on their recent activities.
21. **Chief Counsel's Report.** None.
22. **Executive Director's Report.** None.
23. **Public Adviser's Report.** The Public Adviser gave a report.
24. **Public Comment.** None.

Appearances:

(*by telephone)

Scott Galati, DayZen, LLC

*Alexandria McBride, ITI

*Barry Stern, Golden Haven Hot Springs

Chris Morello, Monterey Regional Airport

Mathew Arms, Port of Long Beach

Brian Choe, South Coast Air Quality Management District

Carter Atkins, The Port of Los Angeles

Mark Houghton, City of Manteca

Andrew Coleman, Electric Power Research Institute

Rich Silverman, City of Manteca

Bret Swain, City of Manteca

Greg Showerman, City of Manteca

Paul Koehler, Pacific Ethanol

There being no further business, the meeting was adjourned.

Respectfully submitted,


CODY GOLDTHRITE
Secretary

